REMARKS

Claim Status

Claims 1-6 are currently pending, with claims 1 and 6 being in independent form. Claims 1-6 have been amended. The amendments to claims 1-6 clarify the wording of the claim, and are cosmetic in nature. No new matter has been added. Reconsideration of the application, as herein amended, is respectfully requested.

Overview of the Office Action

Claims 1-6 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Pub. No. 2002/0156883 ("*Natarajan*") in view of U.S. Pub. No. 20040166843 ("*Hahn*").

Applicant has carefully considered the Examiner's rejection, and the comments provided in support thereof, and respectfully disagree with the Examiner's analysis. For the reasons which follow, it is respectfully submitted that all claims of the present application are patentable over the cited art.

Patentability of the Independent Claims Under 35 U.S.C. §103(a)

Independent claim 1 recites an architecture manager that is configured to independently manage each of a plurality of communications networks after receipt of "a non-unique address via the associated addressing scheme from each of said plural communications networks connected to the terminal". Independent claim 6 correspondingly recites the step of "independently managing each of said plural communications networks after receiving a non-unique address from each of said plural communications networks connected to said terminal". The combination of *Natarajan* and *Hahn* fails to teach or suggest a system and/or method including a mobile terminal that is modified to operate with multiple data communications

networks and multiple different addresses or a non-unique address, as defined and recited in independent claims 1 and 6.

The Examiner (at pgs. 3 and 5 of the Office Action) has acknowledged that *Natarajan* fails to teach or suggest a "mobile network", as recited in independent claims 1 and 6, and cites *Hahn* for this feature.

Applicant disagrees, however, that the combination of *Natarajan* and *Hahn* achieves the subject matter of now amended independent claim 1. There is nothing in *Natarajan* and *Hahn* regarding the subject matter recited in independent claims 1 and 6.

Natarajan discloses a method for managing multiple computer networks having repetitive IP addresses, i.e., a non-unique IP address. *Natarajan* (paragraph [0018], lines 4-8; FIG. 1) explains that the "network 100 can include a plurality of collection computers, wherein each collection computer is assigned a management domain identifier uniquely associated with a management domain in which each collection computer resides". *Natarajan* (paragraph [0019], lines 3-8) additionally explains that "collection stations 120 and 125 have been deployed to monitor a first computer network (e.g., a customer site designated as 'CO'), while collection stations 130 and 135 have been deployed to monitor a second computer network (e.g., a customer site designated as 'NY')". According to *Natarajan,* "within the first computer network, a first network element 140 is designated by any IP address, for example, '10.2.112.1', that is unique within first computer network 140. Within second computer network 145, a second network element is designated by any IP address, for example, '10.2.112.1', that is unique within second computer network 145" (see paragraph [0020], lines 1-7). *Natarajan* thus teaches that the different networks can be provided with a single address that is duplicated or assigned to both communications networks, i.e. a single or non-unique address.

Natarajan (paragraph [0019]; FIG. 1) additionally explains that "between first computer network 140 and second computer network 145, the designated IP address of, for example, '10.2.112.1' is not unique. Thus, as can be seen in FIG. 1, collection stations have been deployed at different customer sites, where the different customer sites have duplicate IP addresses between them. However, those of ordinary skill will recognize that different customer sites can have not only duplicate IP addresses between them, but also duplicate network names and duplicate hostnames". Here, however, *Natarajan* explains that the IP addresses across communications networks are non-unique in that two networks share the same IP address.

In paragraph [0022], *Natarajan* explains that "[t]o differentiate between management domains, a management domain identifier is uniquely associated with each management domain. According to an exemplary embodiment, the management domain identifier can be, for example, the domain name of the management domain. For example, the management domain identifier for collection stations 120 and 125 corresponding to management domain 110 would be "CO". The management domain identifier for collections stations 130 and 135 corresponding to management domain 115 would be "NY". However, any management domain identifier which uniquely identifies a management domain can be associated with each management domain. Consequently, different management domain identifiers can be assigned to the collection stations monitoring networks of different customers, and the same management domain identifiers can be assigned to the collection stations monitoring the networks of the same customer".

Natarajan therefore teaches that two different networks can send the same IP address, for example "10.2.112.1". However, the system of *Natarajan* assigns a different "domain identifier" to each customer monitor within a given domain, i.e., "CO" and "NY". In the *Natarajan* system, different "domain identifiers" are assigned to different communications networks that have the same IP addresses. Differentiation between information bearing the same IP address is therefore provided

by checking the domain name that is assigned to each collection station that monitors a communications network. The received information thus includes these different "domain identifiers", even though the received information still contains the non-unique IP addresses of the communications networks 140 and 145 shown in FIG. 1 of *Natarajan*.

The method of *Natarajan* accordingly differs from applicant's claimed system and method. *Natarajan* (paragraph [0027], lines 5-13) describes that "[i]n step 305, at least one management computer can receive first information from a first collection computer, wherein the first information includes a first network address and a first management domain identifier. In step 310, the management computer can receive second information from a second collection computer, wherein the second information includes a second network address and a second management domain identifier". *Natarajan* thus teaches that the first received information must include a first network address and a first domain identifier, and that the second received information must include a second network address and a second domain identifier. The first and second networks can share the same (i.e., non-unique) IP address, but not the same domain identifier.

Natarajan (paragraph [0027], lines 13-22) additionally describes that "[i]n step 315, the management computer can compare the second network address to the first network address using the second management domain identifier and the first management domain identifier. Based on the results of the comparison in step 320, in step 325 the management computer can assign the network element associated with the second network address as a primary network element when the second network address belongs to a different management domain than the first network address". *Natarajan* therefore teaches that the IP addresses are compared, the result of the comparison is obtained and that different domain identifiers are assigned to computers (i.e. collection stations) that monitor different communications networks. Moreover, *Natarajan*

(paragraph [0026]) teaches that a test is performed to determine whether the network element with the received IP address belongs to the same domain associated with the duplicate IP address.

Natarajan therefore teaches the use of a "domain identifier" to identify the particular communications network that sent the received information (i.e., to differentiate the communications network having an IP address identical to the same IP address of another communications network). Even though *Natarajan* teaches a method and system in which the IP addresses of the first and the second communications networks are identical, i.e. the same IP address is sent from each of the communications networks 140 and 145, the first and the second "domain identifiers" are different, and it is those domains identifiers that are used to identify the source of the received information. The two communications networks thus have different addressing schemes, i.e., one network has the domain identifier "CO" and the other network has the different or unique domain identifier " NY".

The claimed invention notably differs from the teachings of *Natarajan.* The claimed invention is directed to the management of identical IP addresses (i.e., non-unique address) from different but not otherwise identified networks. *Natarajan* is silent with respect to the problem of receiving identical IP addresses (i.e., a non-unique address) from two different communications networks, both of which are operating with the same addressing scheme. In *Natajaran*, the communications networks have different addressing schemes. *Natarajan* thus fails to teach or suggest the subject matter of independent claims 1 and 6.

With reference to FIG. 1 of *Hahn*, the mobile terminal (MT) accesses several services over one packet data network (i.e., the Internet) via at least two mobile radio networks (2, 3), where the 1st mobile radio network (2) represents an "overlay" network for the 2nd mobile radio network (3) to use one or more functions of the 1st mobile network (2) for the 2nd mobile network (3). In this manner, subscribers who have access to the 1st mobile network (2) are able to use the

services on the 2nd mobile network (3), such as a roaming function. The registration process of authentication and authorization of a subscriber can be performed for the 2nd mobile network (3) via the 1st mobile network (2) by comparing the subscriber IP address of the subscriber and checking for the presence of a corresponding PDP Context in the 1st mobile network (2) to connect the subscriber to "the same unique packet data network", i.e., the Internet.

Hahn (paragraph [0021], lines 1-7) describes that "the entire connection from a mobile terminal (MT) to a GGSN in the 2G/3G mobile radio network, including the connection via the WLAN, can be implemented as an extension to the GPRS secondary PDP context". *Hahn* (paragraph [0021], lines 7-10) further describes that "this is regarded as being the capability of a mobile terminal to set up two or more connections to the GGSN using one IP address". *Hahn* thus teaches that the connection of the MT can be implemented as an extension to a secondary PDP Context of the 1st mobile network (2) with "the same unique IP address" corresponding to "the same unique packet data network", i.e., the Internet, and that the MT is capable of setting up several connections to a unique GGSN (in a mobile network) "using one unique IP address" with secondary PDP Contexts.

Hahn (paragraph [0043], lines 1-7) additionally states that "the mobile terminal 7 can set up further secondary PDP contexts for the same IP address in order, for example, to reserve bandwidth, particularly at the radio interface, for specific services". However, *Hahn* does not teach that the MT (7) establishes additional secondary PDP Contexts for multiple non-unique IP addresses in order to reserve the bandwidth for specific services.

Hahn (paragraph [0044]) also teaches a variation of the system described in paragraph [0043], where "[t]he mobile terminal 7 is registered in the 2G/3G mobile radio network 2 and has set up at least one PDP context to an Internet service provider 8, from whose address book it receives an IP address (in the following text: IP-mt)". *Hahn* (paragraph [0044], lines 11-14)

describes that "[t]he mobile terminal 7 can set up further secondary PDP contexts for the same IP address in order, for example, to reserve bandwidth, in particular at the radio interface, for specific services".

Finally, *Hahn* (paragraph [0044], lines 16-24) describes that "[t]he mobile terminal 7 identifies the presence of a second alternative mobile radio network 3, and decides to use it. To do this, it sets up a connection to the LMA 5, from which it receives an IP address. The mobile terminal 7 signals to a packet distributor 9 and/or to the home agent 9 in the GGSN 4 that it wishes to provide the Internet service for its IP-mt via the LMA 5. This may be done both via the 2G/3G mobile radio network 2 and via the WLAN 3".

Hahn thus teaches that the MT is registered in the 1st mobile network (2) and sets up one PDP Context to an Internet service provider (8), from whose address book it receives an IP address (IP-mt), and that the MT can set up additional secondary PDP Contexts for "the same IP address". The MT identifies the presence of a 2nd mobile network (3) and decides whether to utilize the 2nd network, and a PDP context is provided to the Internet service for its "IP-mt" to accomplish use of the 2nd network such that the MT and "its unique IP-mt address" may be authenticated and authorized to use a desired service. *Hahn* thus clearly and repeatedly describes the use of a unique or single IP address. The claimed invention, in contrast, implements a non-unique address scheme.

An important characteristic of the claimed invention is the possibility or ability to work with several addresses or a non-unique address via the associated addressing scheme as defined by claims 1 and 6. The ETSI standard requires that the same terminal has to be connected simultaneously with several communications networks. This standard is described at paragraph [0014] of the instant publication. However, the ETSI standard fails to provide a way to accomplish such a result. Paragraphs [0014] thru [0017] of the instant publication explain that a network sends

an address to a terminal. Paragraph [0019] of the instant publication further describes an addressing problem associated with the reception of two (or more) identical addresses (i.e. non-unique addresses). In the claimed invention, each network interface is associated with one address that originates from one specific network. This concept is described at paragraphs [0068] thru [0070] of the instant publication (see "only one address"). Without the advantages provided by the claimed invention, a "normal" terminal can only work with a unique addressing scheme having different addresses so as not to violate the principle of unique addressing (see, for example, paragraphs [0071] to [0072] of the instant publication). As described at paragraph [0073] of the instant publication, the claimed invention permits a terminal to operate if it receives an identical address and addressing scheme because as, described at paragraph [0073], the terminal can receive two identical addresses, i.e., non-unique addresses.

This characteristic and the configuration of a mobile terminal to advantageously function with several communications networks are neither explained nor described in the *Hahn* or *Natarajan* publications. *Natarajan* and *Hahn* each fail to provide any explanation whatsoever with respect to the management of addresses of different communications networks that are received when a mobile terminal is simultaneously connected with several communications networks. In particular, *Natarajan* and *Hahn* are silent with respect to the problem of receiving an identical address (i.e., a non-unique address) from two different communications networks, both of which are operating with the same addressing scheme, as recited in independent claims 1 and 6.

By virtue of the above-discussed differences between the recitations of independent claims 1 and 6 and the teachings of *Natarajan* in combination with the teachings of *Hahn*, and the lack of any clear motivation for modifying the reference teachings to achieve applicants' claimed

invention, independent claims 1 and 6 are deemed to be patentable over *Natarajan* and *Hahn* under 35 U.S.C. §103.

Dependent claims

In view of the patentability of independent claims 1 and 6, for the reasons presented above, each of dependent claims 2-5 is patentable therewith over the prior art. Moreover, each of these claims includes features which serve to even more clearly distinguish the invention over the applied references.

Conclusion

Based on all of the above, applicants submit that the present application is now in full and proper condition for allowance. Prompt and favorable action to this effect, and early passage of the application to issue, are solicited.

Should the Examiner have any comments, questions, suggestions or objections, the Examiner is respectfully requested to telephone the undersigned to facilitate an early resolution of any outstanding issues.

Respectfully submitted,
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